

New Genera and Species of Braconidae, Mostly Malayan.

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In the course of a search for natural enemies of the cane borer (*Rhabdocnemis obscura*), conducted by the Hawaiian Sugar Planters in the years 1906-1911, an extensive collection of insects was made by Mr. Frederick Muir, field entomologist on the Planters' Experiment Station staff, as well as by the late Frank W. Terry, assistant entomologist, who also had part in the field work. The *Braconidae* from this collection were referred to the writer for study, and the present paper describes some of the new genera and species appearing in the collection, the types of which remain in the H. S. P. A. Experiment Station collections, Honolulu.

Sub-fam. BRACONINAE.

Platybracon distinctus, n. sp.

♀ 10 mms. long. Ochraceous, depressed, head and thorax smooth and polished, abdomen coarsely rugose, hairy. Head cubical, very wide and flat on top, widely extended behind the eyes, ocelli arranged in an equilateral triangle anteriorly on the vertex, the enclosed space black, the members removed from each other about 1 diameter, from the eye and occipital margin about 8, front excavated, with a median longitudinal furrow, antennal sockets close to eye margin, tuberculate and margined, antennae filiform, 53-segmented, long as the body, black, segments 1 and 2 stout, the 1st with denticulate apical margin, face short and wide, slightly receding, a semicircular, medially carinate plate protruding above foveate beneath, mandibles stout, cheeks moderate but postgenae well developed, palpi filamentous. Thoracic notum flat, metanotum with faint median longitudinal carina, upper half of metathoracic pleurae lying in dorsal plane, mesopleurae produced flatly on the venter. Abdomen short ovate, 1st abdominal segment shorter than wide posteriorly, raised in the middle and longitudinally striate, broadly flat on the sides, longitudinally striate within, smooth nearer the edges, 2nd and following segments transverse, 2nd with a raised bicarinate longitudinal middle piece, extending from the anterior margin half the length of the segment, 2nd, 3rd and 4th with a broad oblique crenulate furrow from the anterior margin at lateral fourth to middle of lateral margin, 2nd and 3rd undivided except by a

broad and deep crenulate furrow, 3rd and 4th with an edge on the posterior margin smooth and polished, ovipositor as long as the body, the valves black and hairy. Legs moderately slender and hairy. Front wings with moderately wide lanceolate stigma, 1st abscissa of the radius one-half the 1st cubital cross-vein, 2nd cubital cell nearly three times as long as wide and with parallel sides, 1st discoidal cell petiolate, nervellus interstitial, the recurrent nervure entering the 1st cubital cell, both the wings amber brown basally, dark fuscous brown apically from the basal nervure with the exception of a hyaline streak extending from the base of the stigma to the middle of the wing.

The ♂ is without a conspicuous facial plate and smaller.

Hab. Amboina. Collected by F. Muir. Described from 4 ♀♀ and 1 ♂ specimens.

Sub-fam. DORYCTINAE.

***Pedinotus javanus*, n. sp.**

♂ 4.5 mms. long. Black, the antennal scape and pedicel, base of mandibles and the legs excepting the mid and hind femora outwardly, the front tibiae basally, mid and hind tibiae medially and the hind tarsi, ochraceous, the palpi, tegulae, mid and hind tibiae basally pallid; rugulose and hairy, head with frontovertex smooth and polished and naked, median lobe of mesonotum, propodeum and basal abdominal segment particularly coarsely reticulately sculptured.

Head quadrate, very convex, the temples full, front excavated, ocelli at posterior margin arranged in an equilateral triangle, the members about 2 diameters apart, about 4 from the border of eye and fully 6 from the occipital margin; antennae on the anterior margin, the sockets slightly elevated, separated from the border of eye by only half as much as from each other, filiform multiarticulate, as long as the body, 1st and 2nd joints stout, anterior angles of clypeus foveate; mandibles short, stout and sharply pointed; cheeks only half as wide as postgenae, which are punctate. Prosternum in advance of pronotum, which is fairly wide, widening on the pleurae and concave medially; the mesonotum, scutellum and metanotum are flat, lying all in the same plane, the median lobe of mesonotum depressed in front, parapsidal grooves confluent, more or less effaced above, scutellum smooth and polished, very finely punctate, two large, shallow foveae basally, postscutellum with a circular carina medially forming a fairly deep fovea at apex of scutellum, which is hairy, three indistinct short longitudinal carinae on metanotum, the pleurae convex; abdomen slender, as long as head and thorax together, depressed in front, corbiculate apically, 1st segment 3 times as long as wide at apex, 2nd and 3rd solidly joined, together almost as long as 1st, the brown, double curved punctate

furrow marking the line of separation nearer apical than basal margin, 2nd segment with anterior angles separated by other brown, curved, punctate furrows, and divided into three scutiform areas by a broad median longitudinal groove which divides a short distance from apical margin, the two branches curving outwardly and joining the lateral furrows near base; 4th and following segments transverse, 1st, 3rd, 4th and 5th tergites with the apical margins polished, 6th and 7th tergites also polished. Legs slender, the coxae and femora short and stout, the former truncate, the latter flattened, especially the hind femora, the tarsi a little longer than tibiae. Wings long and slender, stigma lanceolate, radius arising before the middle and reaching tip of wing, 1st abscissa less than half the length of 2nd, 2nd cubital cell about 3 times as long as wide, parallel-sided, recurrent nervure interstitial, nervellus postfurcal, subdiscoidal joining discoidal near lower angle. Radius in hind wing nearly effaced.

Hab. Roban, Java. 1 specimen. Collected by F. Muir.

***Ischiogonus malayensis*, n. sp.**

♀ 8 mms. long. Head, prothorax and mesothorax ochraceous, metathorax and abdomen black, abdominal sternites 1 to 3 luteous, the color extending on to the dorsum narrowly at the sides.

Head, smooth, polished, cubical, rather convex, temples rounded, eyes bulging slightly, front excavated, ocelli on anterior margin of vertex, arranged in an isosceles triangle, the anterior angle of which is obtuse, the lateral members a little closer to each other than to the border of the eye, the occipital margin about three times as far off; antennae placed in large oval sockets close to the border of the eye, filiform, joints 1 and 2 stout; face above clypeus transversely aciculate and hairy; mandibles stout, short, curved and acutely pointed at apex; cheeks less than one-half the width of postgenae. Pronotum and pleurae concave medially, the concavity costate; mesonotum trilobed, the median lobe especially bulging, parapsidal furrows costate and indistinct beyond the middle, the lateral lobes being separated by a broad, shallow bicarinated depression or furrow, pleurae striate above, the posterior margin marked by a costate furrow; disc of scutellum tri-angulate, bifoveate basally and depressed at sides; metanotum and pleurae coarsely reticulately rugose, the notum biareolate and smooth basally. Abdomen elongate ovate, 1st segment less than twice as long as wide at apex, 2nd and 3rd solidly joined, quadrate, 4th and following segments transverse, 1st segment longitudinally bicarinate, the carina strongly raised at base; between the carinae the surface is longitudinally striate, outside reticulately rugose, 2nd tergite and the broad furrow separating 2nd and 3rd longitudinally striate, a narrow marginal area on the sides of both tergites finely striate throughout and separated from the middle by an inconspicuous fur-

row; the posterior margin of tergites 3 to 6 and 7 and 8 completely smooth and polished; anteriorly the surface is very finely rugulose. The ovipositor is a little longer than the abdomen, the legs slender and hairy, coxae truncate, hind femora short and rather flat. The wings are a little fuscate, long and slender, the stigma lanceolate, 1st abscissa of radius about half the length of 2nd, the 2nd cubital cell twice as long as wide and parallel-sided; recurrent nervure entering the 1st cubital cell, nervellus postfurcal, subdiscoidal joining the discoidal below the middle.

Hab. Malay Peninsula. One specimen. Collected by F. Muir.

***Ischiogonus fijiensis*, n. sp.**

♀ 5.5 mms. long. Ochraceous, the eyes, flagellum, tips of mandibles, ocellar space, base and apex of sheath of ovipositor, abdominal tergites beyond 1st and sternites beyond 4th black, the palpi, basal abdominal segment, 2nd, 3rd and 4th sternites (and a narrow stripe extending to the dorsum) pallid. Smooth and shining, the head polished, cubical, convex, the temples rounded, eyes bulging slightly, front flat, ocelli on anterior margin of vertex, arranged in an isosceles triangle, the anterior angle of which is obtuse, the lateral members more than twice as far from border of eye, about four times as far from occipital margin, as from each other; antennae placed in circular sockets close to the border of eye, filiform, joints 1 and 2 stout; face transversely aciculate and hairy, clypeal foveae conspicuous; mandibles stout, short, curved and acutely pointed at apex; cheeks not as wide as postgenae. Pronotum and pleurae concave medially, the concavity costate, mesonotum trilobed, the parapsidal furrows deep, disc of scutellum flat, triangulate, the apex truncate, four oval foveae at base; metanotum flatly convex and rugose, biareolate at base, the areolae rather coarsely punctate though smooth at the base and separated by a short carina with a punctate double line on either side. Abdomen elongate ovate, 1st segment about as long as broad at apex, following segments transverse, 2nd and 3rd solidly joined, with the anterior angles of the tergites separated by a furrow, tergite of 1st segment, 2nd basally, the lateral angles and furrow between 2nd and 3rd, longitudinally striate, the rest of the abdomen smooth and polished, 5th, 6th, 7th and 8th tergites with a transverse fascia of hairs; ovipositor as long as the abdomen; legs slender, coxae truncate, femora short and somewhat flattened, especially the hind femora. Wings dark fuscous, long and slender, stigma lanceolate, 1st abscissa of radius a trifle more than half the length of 2nd, 2nd cubital cell nearly twice as long as wide and parallel-sided, recurrent nervure entering 1st cubital cell, nervellus postfurcal, subdiscoidal joining the discoidal below the middle.

Hab. Fiji. Two specimens. Collected by F. Muir.

Sub-fam. RHOGADINAE.***Colastes javanus*, n. sp.**

♂ 5 mms. long. Head and thorax smooth and shining, only the metanotum rugose, abdomen dorsally rugoso-striate. Ochraceous, eyes, ocellar space, parapsides, metanotum and abdominal tergites basally infuscated.

Head transverse, rather wide and thick in the middle, eyes bulged and slightly emarginate within, ocelli arranged in an equilateral triangle on the vertex, the members large, less than one diameter from border of eye, a median furrow behind reaches occipital margin, front flat and inclined to the face, which is vertical but slightly receding, antennae broken, joints 1 and 2 stout, separated at base and fairly close to margin of eye, the sockets large, almost tuberculate, mandibles stout, cheeks less than half short diameter of eye and separated from face by a distinct furrow. Pronotum fairly wide, the pleurae much wider and concave, with a costate furrow in the concavity, mesonotum convex, parapsidal grooves complete, converging apically in a short longitudinal furrow, middle lobe bulging, apical margin of scutellum and postscutellum angulate and carinate, disc of the former triangular, a large shallow fovea at base and wide shallow costate grooves laterally, metanotum with two large semicircular areolae basally. Abdomen elongate oval, depressed, 1st segment longer than wide, 2nd and 3rd solidly joined, together longer than wide, a shallow depression beyond the middle marking their separation, 4th, 5th and 6th transverse, 7th and 8th small and inconspicuous, hind margin of all the segments swollen and carinate.

Wings hyaline, stigma broad lanceolate, radius emerging before middle, 1st abscissa less than half 2nd, recurrent nervure interstitial, subdiscoidal joining the discoidal below the middle and the latter broken, nervellus postfurcal.

Hab. Buitenzorg, Java. One specimen. Collected by F. Muir.

***Heterogamoides*, gen. nov. (type *muirii*).**

Eyes and ocelli large, the latter hardly farther from occiput than margin of eye, cheeks small, palpi flat but not expanded, parapsidal grooves indistinct, transverse groove at base of scutellum sex-foveate, metanotum convex and medially longitudinally carinate, abdomen elongate oval, depressed, 1st segment longer than wide, 2nd quadrate, 3rd and following transverse, tergites medially longitudinally carinate and longitudinally striate to middle of 3rd segment, transverse impression between 2nd and 3rd quite distinct, ovipositor short, stigma of front wings broad lanceolate, radius emerging from middle, 1st and 2nd abscissae subequal, 2nd cubital cell more than twice as long as wide and parallel-sided, recurrent ner-

vure entering 1st cubital cell, nervellus nearly midway between basal and recurrent on median nervure, subdiscoidal joining discoidal below middle, radius in hind wing distinct. Differs from *Rhogas* in length of 1st abscissa of the radius.

Heterogamoides muirii, n. sp.

♀ 7.5 mms. long. Rugulose and hairy; ochraceous, eyes, flagellum, ocellar space, hind tibiae from middle, tarsi and valves of ovipositor black.

Head smooth on vertex, the front polished behind antennae, eyes emarginate within, ocelli elliptical, arranged in an equilateral triangle on vertex, less than half a diameter apart, front inclined to face, which is vertical but slightly receding, antennal sockets large, joints 1 and 2 stout, flagellum dull and hairy, face longer than wide, cheeks short. Pronotum fairly wide, pleurae wider, concave, a costate furrow in concavity, mesonotum convex, parapsidal grooves indistinct, pleurae and sternaе confluent, hind margin of scutellum polished, a semicircular, sexfoveate groove at base and wide oblique grooves laterally, metanotum flatly convex, medially longitudinally carinate, spiracle round and small. Abdomen depressed, long elliptical, rather obovate, 1st segment longer than wide, 2nd quadrate, 3rd and following transverse. Ovipositor short.

Wings hyaline, stigma and veins ochraceous, a fuscous spot below the parastigma, 2nd cubital cell much longer than wide, 1st and 2nd abscissae of the radius subequal, nervellus postfurcal.

Hab. Buitenzorg, Java. One specimen bred VII-07 from spiny lepidopterous pupae (376), F. Muir.

Macrostomion malayensis, n. sp.

♀ 5.5 mms. long. Ochraceous, antennae, legs, palpi and tegulae paler, the parapsides, pleurae, metanotum, hind coxae, abdominal tergites 1 and 2 and remaining tergites basally infuscated; head and thorax smooth and shining, finely punctate, abdominal tergites longitudinally striate.

Head transverse, eyes slightly bulging, ocelli large, arranged in an isosceles triangle on the vertex, the anterior angle acute, the anterior member about 1 diameter from lateral, which are still further removed from eye margin but less than half a diameter apart, a median longitudinal furrow on the vertex reaches from the ocellar area to the occipital margin; front excavated, the sides of the excavation margined and the ocellar area surrounded by a shallow furrow or depression; antennae filiform, multiarticulate, 1st and 2nd joints stout; face fairly wide and convex, cheeks narrow. Pronotum narrow, pleurae wider, concave, costate in the concavity; mesonotum bulging, the anterior face of the middle lobe almost perpendicular, parapsidal grooves distinct, merging in a wide

medial longitudinal furrow apically, pleurae with an indistinct costate furrow below; scutellum triangular, flatly convex on the disc, two highly polished, indistinctly divided, shallow foveae basally, a transverse, angulate, submarginal area apically smooth and shining declivous laterally; metanotum very convex, divided medially by a broad, apically widening, longitudinal furrow, with carinate lateral margins, the upper part of the posterior face bearing several transverse carinae; spiracles small and circular. Abdomen elongate, corbiculate, rather depressed at the base, 3rd and following segments more or less convex dorsally, lateral margins carinate, 1st segment twice as long as wide at the apex, the base very narrowly contracted, 2nd and 3rd solidly joined, 2nd quadrate, 3rd transverse, the line of separation deeply impressed and costate, 4th and remaining segments transverse, the hind border narrowly smooth and polished, practically all the 6th tergite so. Hypopygium large, compressed, plowshare-shaped, ovipositor not longer than the 6th segment. Legs, especially the posterior pair, long and slender, the tibial spurs slender and curved.

Wings hyaline, stigma lanceolate, radius emerging a little behind the middle, 1st abscissa less than half the 2nd, 2nd cubital cell twice as long as wide, recurrent nervure entering 1st cubital cell somewhat before the 1st cubital cross-vein, nervellus postfurcal, subdiscoidal nervure joining discoidal below the middle.

Hab. Malay Peninsula. One specimen. Collected by F. Muir.

Macrostomion amboinensis, n. sp.

♀ 8 mms. long. Ochraceous, only the eyes, tips of mandibles and the area including the ocelli black. Head transverse, eyes large and bulging, slightly emarginate on the inner margin by the base of antennae, ocelli fairly large, oval, arranged in an equilateral triangle on the sides of a small prominence on the vertex, the lateral members removed from the others and from the border of the eyes about the width of their short diameter, from the occipital margin about twice the long diameter; the face below the antennae is slightly bulged and a median carina extends nearly to the clypeus; behind the antennae the head is considerably excavated; the cheeks are narrow. Vertex and cheeks smooth and shining, sparsely punctured, the face finely rugose and hairy. The mandibles are short and broad at the base, rugoso-punctate and hairy. Antennae 46-segmented, long and slender but shorter than the body, the socket of the first and second segments large and conspicuously rimmed. Maxillary palpi 6-segmented, 1st and 2nd short, 3rd long, twice the 4th, both flat, 5th so to a less degree and twisted on 4th, 6th slender and apparently further subdivided; labial palpi 4-segmented. Thorax deep and slender, not as wide as head, punctate and hairy, pronotum

small and collar-like, mesonotum bulged and decidedly trilobed, the parapsidal grooves being deep and wide; pleurae well developed. Scutellum broad and angulated posteriorly, the shield rather narrow; in front and next the anterior margin are two large shallow smooth foveae separated by a carina. Postscutellum also rather well developed, the metanotum rounded, with a median carina anteriorly and two lateral carinae posteriorly, connected by several irregular transverse ridges. Abdomen long and slender, longer than head and thorax together, subsessile, depressed to the penultimate segment, 1st segment 3 to 4 times longer than its greatest width, 2nd a little shorter, 3rd, 4th, 5th and 6th quadrate, the last segment compressed, the very large sternites forming with the inflexed tergites a fig.—8-shaped genital opening. Ovipositor short and stout, the valves flat. Median carina extends to apex of 4th segment. All the tergites longitudinally striate and umbilicately punctate except last two, which are punctate. Wings hyaline, stigma and veins ochraceous, stigma lanceolate, 5 times as long as wide, radius emerging at second-fifth from base, 1st abscissa about one-half second, 3rd nearly reaching tip of wing, 1st cubital and 1st discoidal separate, 2nd cubital parallel-sided, twice as long as high, 1st discoidal short pedicellate, recurrent nervure enters 1st cubital cell, transverse median postfurcal, submedian cell longer than median.

Hab. Amboina. Two specimens. Collected by F. Muir, IV-09.

In the ♂ the head and abdomen are darker, the antennae 49-segmented. 3rd and 4th segments of the maxillary palpus abnormally swollen and flat, the 5th segment small and top-shaped, lying on the upper face of the 4th segment before the apex, 6th joint long and slender with subdivisions. The abdomen has 8 visible segments, 1st and 2nd subequal and about twice their width, 3 to 7 quadrate, 8 very short. Penis protruding slightly.

Hemigyroneuron dubiosus, n. sp.

♂ 7.5 mms. long. Ochraceous, the head black, the abdomen outwardly from anterior margin of 2nd segment black or blackish, a suffusion of ochraceous on 2nd segment. Antennae black beyond 2nd segment. Hind tibiae and femora infuscated. Head transverse, eyes large, extending from the vertex almost to the base of the mandibles. Ocelli very large, the lateral members elliptical; arranged in an equilateral triangle, the lateral members removed from each other about 3 times the distance from the border of the eye or from the emargination of the occiput; in front of ocelli the head is deeply impressed. the antennae at the front set into rimmed sockets. Antennae 64-jointed, long and slender, as long as the body. Face and cheeks rather narrow; all transversely rugose, a slight carina on upper part of face, the eyes emar-

ginate behind antennae. Mesonotum rather convex in front, coarsely punctate, mesopleurae smooth in the center, punctate above and below; in front of the smooth broad, saddle-shaped scutellum is a wide and deep-set fovea, marked in the center with 6 closely set longitudinal lines; the postscutellum is also short and broad but not so steeply declivous at the sides as the scutellum; there are two small foveae in the center, larger ones bordering them on the side. The metanotum is fairly flat, rugose, almost longitudinally striate, and has a prominent median longitudinal carina; the spiracle is short oval, its rim hardly raised; the metapleurae are very finely reticulately sculptured in the center, coarsely punctate outwardly. Abdomen sessile, elongate, depressed, 1st segment longer than broad, 2nd quadrate, 3rd and following segments broader than long; the median longitudinal carina extends nearly to the middle of the 3rd segment and as far as it reaches the dorsum is longitudinally striate; beyond it is punctate and hairy, and on either side of the median line at the anterior margin of the 4th and 5th segments are large shallow circular foveae. Apex bluntly pointed, penis protruding a little beyond the short cerci. Legs long and slender, spines of tibiae straight. Wings hyaline, stigma and veins ochraceous to dark brown, radius emerging from middle of stigma, which is about 4 times as long as broad, 1st abscissia shorter than 2nd, 2nd cubital cell a little longer than wide but parallel-sided, 1st discoidal cell short petiolate from middle of parastigma, 2nd discoidal cell not completely closed and a pale orange suffusion on the disc below it, the externo-medial and the anal nervures greatly thickened outwardly and the transverse median, which leaves the median far beyond where the basal intersects, is slightly curved.

Hab. Laloki, Papua. One specimen. Collected by F. Muir, 1910.

Sub-fam. SIGALPHINAE.

Muiriella new genus (type *concisa*).

Near *Polydegmon* but the hind coxae without a tooth and the ventral side of abdomen entirely concave.

Muiria *concisa*, n. sp.

♀ 2 mms. long. Black, the legs and antennae basally yellowish brown, head, prothorax and mesothorax smooth and polished, finely punctate and hairy. Head transverse, wide between the eyes, ocelli arranged in an isosceles triangle on the vertex, the anterior angle obtuse, lateral members nearly as far from each other as from the border of the eye, front excavated between the antennal sockets, which are somewhat removed from the eye margin, antennae 21-segmented, not as long as the body, filamentous, the segments decreasing in length outwardly, the last ten or so moniliform, apically recurvate;

face short, transverse, clypeus distinct, cheeks moderate, trophi pallid, occiput flat and distinctly margined. Pronotum and pleurae forming a well developed collar with a median transverse costate furrow, the parapsidal furrows on the mesonotum represented by oblique, coarsely punctate lines meeting at the posterior margin, mesopleurae coarsely punctate above and below, smooth and shining in the middle, a distinct punctate line on posterior margin; disc of the scutellum triangulate, a broad costate furrow in front, the lateral areas and the post-scutellum also foveolate, metathorax rugose, upper hind angles denticulate. Abdomen corbiculate, shorter than the head and thorax, coarsely longitudinally striate and rugose between the striae, with two transverse carinae and denticles along the lateral margins behind the posterior carina; ovipositor longer than the abdomen, ochraceous. Legs moderately short. Wings reaching beyond the tip of the body, hyaline, the tegulae yellowish brown, stigma lanceolate, brownish black, radial cell complete but hardly reaching apex of wing, only one cubital cell present, the cubitus obliterated a little beyond the intersection of the 1st cubital cross-vein, 1st discoidal cell sessile, nervellus postfurcal, subdiscoidal nervure inserted in the lower half of the discoidal, radius obliterated in hind wing, all the nervures yellowish brown.

Hab. Larat. One specimen. Collected by F. Muir, Dec. 1907.

Sub-fam. CHELONINAE.

Ascogaster rugosa, n. sp.

♂ 3 mms. long. Black, coarsely rugose throughout and clothed with silvery hairs, antennae and legs yellowish brown, the hind femora, tibiae (except at base), and tarsi fuscous, coxae black. Head large, wide between the eyes and thick, dorsally flat and horizontal, ocelli arranged in almost a straight line across the vertex, the members widely separated but the anterior closer to the lateral than the eye or the occiput, eyes small, scrobes wide and smooth, separated by a small, semi-circular lamellae, antennae filamentous, shorter than the body, 1st segment flat and stout, 2nd small, 3rd and 4th equal, four times as long as wide, 5th and remaining segments successively shorter, quadrate beyond the 8th; face perpendicular, hardly as long as broad, the cheeks as wide as the eyes, the postgenae bulging and wider, trophi pallid, occiput concave and distinctly margined. Pronotum narrow, pleurae small, mesonotum with the parapsides almost obliterated, pleurae convex, disc of the scutellum triangulate, the anterior furrow costate, lateral areas and postscutellum also costate, metanotum truncate behind, the posterior margin dorsally 4-denticulate. Abdomen widely joined, oval but pointed at apex, corbiculate, without apparent segmentation, two lateral longitudinal carinae at base venter deeply concave for most of its length. Hind legs long and

fairly stout. Wings not reaching tip of abdomen, for the most part hyaline but clouded somewhat beneath the stigma, which is broad and short; radial cell also short, no longer than the stigma, cubital cells complete, recurrent nervure entering 2nd cubital cell, 1st discoidal cell short petiolate, nervellus almost interstitial, subdiscoidal nervure entering discoidal shortly below the middle, radius in hind wings obliterated.

Hab. Roban, Java. One specimen (482). Collected by F. Muir, VI, 07.

***Ascogaster argentea*, n. sp.**

♂ 5 mms. long. Black and shining, clothed with silvery hairs, the antennae basally, fore and middle legs, trophi and tegulae brown to fuscous, head, pro- and mesothorax finely to coarsely punctate and areolate, metathorax and abdomen rugose, the latter longitudinally striate basally. Head large, transverse, wide between the eyes and thick, ocelli arranged in an isosceles triangle on the vertex, the anterior angle obtuse, lateral members as far from each other as from the occipital margin, one-half the distance to the border of the eye, front excavated behind the antennae, which are filiform, nearly as long as the body, 1st segment stout, face short carinate above, cheeks moderate, the postgenae bulging and much wider, occiput concave and distinctly margined. Pronotum narrow, the pleurae well developed, the mesonotum flat, the parapsidal grooves represented by broad foveate lines which widen posteriorly and merge at the posterior margin, pleurae convex, the posterior margin with a deep costate furrow in front of it, disc of the scutellum triangulate with a broad costate groove in front, the lateral areas and postscutellum also costate, the metanotum truncate posteriorly and areolate, the upper hind angles denticulate, the two within less distinct. Abdomen as long as the thorax, sessile, long oval, corbiculate, two lateral longitudinal carinae at base, the venter deeply concave for most of its length. Legs fairly stout, the metatarsus as long as all the other tarsal segments together. Wings not reaching tip of body, hyaline, stigma lanceolate, radial cell short, cubital cells complete, 1st discoidal cell shortly petiolate, recurrent nervure interstitial, nervellus postfurcal, subdiscoidal nervure entering below the middle of the discoidal, radius in hind wing obliterated.

Hab. Buitenzorg, Java. One specimen. Collected by F. Muir.

Sub-fam. AGATHINAE.

***Beognatha gracilis*, n. sp.**

♀ 3.5 mms. long. Smooth or finely punctate and hairy, the metanotum and 1st and 2nd abdominal tergites rugulose, the latter microscopically sculptured, vertex on head, discs of pro- and mesopleurae and apical abdominal segments polished,

shining black, the head (except on the vertex), the basal part of the 2nd abdominal tergite (except a spot in the middle), the basal abdominal sternites, antennae distally from 1st segment, tegulae and legs (except hind coxae and femora and tibiae apically) yellowish to reddish brown.

Head transverse, triangular viewed from in front, ocelli arranged in an isosceles triangle on the vertex, the anterior angle obtuse, lateral members about 2 diameters apart, 3 from eye margin, more than 1 from anterior member; the front is excavated behind each antennae, the excavations being separated by a wide carina; face shorter than wide, cheeks as long as short diameter of eye. Pronotum and pleurae divided by a transverse furrow or depression, middle lobe of mesonotum bulging in front, parapsides complete, the furrows and lateral margins costate, the furrow separating mesosternae and mesopleurae as well as the posterior margin of the latter costate, the disc of scutellum triangular, slightly convex, the metanotum convex and margined behind. Abdomen about as long as thorax, 1st segment longer than broad, 2nd and 3rd solidly joined, quadrate, the 2nd impressed transversely at about middle, 4th and following segments transverse, ovipositor longer than abdomen. Hind legs stouter than anterior ones. Wings hyaline, stigma lanceolate, radial cell short and narrow, 1st and 3rd abscissae of cubitus obliterated, 2nd cubital cell incomplete.

Hab. Larat. One specimen. Collected by F. Muir, XII, 07.

***Euagathis spilota*, n. sp.**

♀ 10 mms. long. Smooth and shining, head and thorax punctate and hairy, abdomen polished; ochraceous, the abdomen darker, hind tibiae (mostly), tarsi, antennae and ovipositor brownish black to black.

Head transverse, triangular when viewed from the front, wide between the eyes which are bulging, the ocelli arranged in an equilateral triangle on the vertex, the members a little further from the eye margin than from each other, the front excavated but not margined, only two short carinae in front between the antennae, which are broken but have 1st and 2nd segments stout; face a little longer than broad, cheeks about as long as the short diameter of the eye. Pronotum narrow, pleurae wider and concave, middle lobe of the mesonotum bulging, marked with two longitudinal furrows, parapsidal furrows complete but not sharply defined, mesopleurae and mesosternae separated by a broad, costate groove, hind margin of the latter and the groove forming the anterior margin of the metapleurae also costate, disc of the scutellum triangular, the posterior margin truncate and distinctly margined, the basal depression wide, deep and smooth, a short median carina partially bisecting it, the postscutellum areolate in the

middle, metanotum more or less flat and completely areolated, there being a wide basal and apical areola, the former divided by a median longitudinal carina, and a median area divided by four longitudinal carinae, the middle two rather close together, the spiracle elliptical. Abdomen compressed, 1st and 2nd tergites flat, 1st twice as long as wide, 2nd quadrate, 3rd almost so, 4th and following shorter, with a thin fascia of hairs along the posterior margin. Ovipositor short. Wings clear, suffused with amber but infusate apically and with a dark brown spot below parastigma and a hyaline streak shortly beyond. Areola four-sided, the 2nd abscissa of the radius however very short, 2nd cubitus broken in the middle but not extended.

Hab. Roban, Java. One specimen. Collected by F. Muir, V-07.

***Euagathis pallida*, n. sp.**

♀ 7 mms. long. Smooth and shining, head and thorax punctate and hairy, abdomen polished; ochraceous, the abdomen lighter, eyes and flagellum of antennae black, hind tarsi and ovipositor dark brown.

Head transverse, triangular viewed from in front, wide between the eyes which are bulging, ocelli arranged in an equilateral triangle on vertex, the members a little further from eye margin than from each other, front excavated but not margined, only two short carinae in front between the antennae which are longer than the body and have 1st and 2nd segments stout, face a little longer than broad, cheeks about as long as short diameter of eye. Pronotum narrow, pleurae wider and concave, middle lobe of mesonotum bulging, marked with two longitudinal furrows, parapsidal furrows complete and sharply defined, mesopleurae and mesosternae separated by a broad, costate furrow, hind margin of the latter and the groove forming the anterior margin of the metapleurae also costate, disc of the scutellum triangulate, the posterior margin truncate and distinctly margined, the basal depression wide, deep and smooth, a short median carina partially bisecting it, the postscutellum areolate, metanotum more or less flat and completely areolated, there being a wide basal and apical areola, the former divided by a median longitudinal carina, and a median area divided by four longitudinal carinae, the median area much shorter than in *spilota*, spiracle elliptical. Abdomen compressed, tergites 1-3 flat, 1 nearly 3 times as long as wide, 2 and 3 quadrate, 4 and following shorter with a thin fascia of hairs along the posterior margin. Ovipositor as long as the 2nd segment. Wings clear, suffused with amber but infusate apically and with a dark brown spot below parastigma and a hyaline streak shortly beyond. Areola four-sided, 2nd cubitus broken in the middle and slightly extended.

Hab. Makassar, Celebes. One specimen. Collected by F. Muir, Dec. 1908.

***Euagathis hongkongensis*, n. sp.**

♂ 8 mms. long. Smooth and shining, head and thorax coarsely punctate and hairy, abdomen polished; ochraceous, the abdomen darker, the tip actually black, hind legs (except trochanters), antennae and ocellar space black.

Head transverse, triangular viewed from in front, wide between the eyes which are bulging, ocelli arranged in an isosceles triangle on vertex, anterior angle obtuse, lateral members twice as far from eye margin as from each other, less than one-half a diameter to anterior member, front excavated but not margined, only two short carinae in front between the antennae, which are longer than the body, the antennal sockets tuberculate, 1st and 2nd segments stout; face a little longer than wide, cheeks as long as eye. Pronotum narrow and folded, pleurae wider and concave, middle lobe of mesonotum bulging, marked with a broad median longitudinal carina, parapsidal furrows complete, broad and deeply grooved, hind margin of mesopleurae and the groove forming anterior margin of mesopleurae and the groove forming anterior margin of metapleurae costate, disc of the scutellum triangulate, the posterior margin truncate and distinctly margined, the basal depression wide, deep and smooth, a short median carina partially bisecting it; the postscutellum areolate, metanotum more or less flat and completely areolated, there being a wide basal and apical areola, the former divided by a median longitudinal carina, the latter indistinctly separated from the short and subquadrate central areol of the median area, which is divided by four longitudinal carinae; spiracle elliptical. Abdomen compressed apically, tergites 1-3 flat, 1 nearly twice as long as wide, 2, 3 and 4 quadrate, following shorter, with a thin fascia of hairs along the posterior margin.

Wings clear, somewhat suffused with amber but infusate apically and with a dark brown band below parastigma and a hyaline streak shortly beyond. Areola triangular, 2nd cubitus curved, not broken in the middle.

Hab. Hong Kong, China. One specimen. Collected by F. W. Terry. Two specimens from Macao, collected by Muir, XII-06.

***Biroia nigra*, n. sp.**

♂ 7 mms. long. Polished black, punctate and hairy. Head transverse, wide between the eyes, which are prominent and bulging, viewed from in front triangular; ocelli arranged in an isosceles triangle on the vertex, the anterior angle of which is obtuse, lateral members further removed from eye than from each other; front excavated and margined behind to the ocelli; antennae joined close to the eye, widely separated, lateral margination continued around their base, 1st segment small, 2nd twice as long as wide, third twice as wide as long,

flagellum filamentous, opaque and hairy; face longer than wide, convex, almost angulate below, dorsal margin bidentate between the eyes, lateral margin foveate below eye; labrum almost quadrate; cheeks as long as short diameter of eye; trophi pallid. Pronotum narrow, pleurae widening and concave; mesonotum flatly convex; a broad costate furrow along the lower margin of mesopleurae; disc of scutellum small, triangular, depressed apically, bifoveate basally; intersegmental furrows separating the thin pleurite between the mesopleurae and metapleurae margined by deep broad costate grooves; metanotum areolate, disc traversed by four longitudinal and many irregular transverse carinae, posterior face 5-areolate. Abdomen basally depressed, compressed apically, 2nd and following segments with a transverse fascia of hairs, 1st tergite ligulate, widening posteriorly but considerably longer than the greatest width, 2nd and 3rd separated only by a thin furrow, 2nd deeply impressed across the middle and anteriorly along the sides; 3rd and following segments transverse and compressed. Hind legs longer than the anterior ones, coxae stout, femora rather short. Wings dark brown basally, hyaline beyond the stigma, radial cell short and narrow, 1st abscissa of the cubitus almost completely obliterated, 2nd cubital cell quadrate.

Hab. Piroe, Ceram. Two specimens. Collected by F. Muir.

Biroia ochracea, n. sp.

♀ 10 mms. long. Smooth and shining, punctate and hairy, the metathorax heavily clothed, abdomen polished; brownish ochreous, the eyes, flagellum, segments 4-8 of the abdomen and sheaths of the ovipositor black.

Head transverse, wide between the eyes, which are prominent and bulging, viewed from in front triangular, ocelli arranged in an equilateral triangle on the vertex, about 1 diameter apart, 5 from the border of eye; front excavated and margined behind to ocelli; antennae joined close to the eye, widely separate, the lateral emargination continued around the base, 1st segment small, 2nd stout, half as wide as long, 3rd half as long as wide, flagellum filamentous, opaque and hairy; face wide between the eyes, narrowed below, dorsal margin between eyes bidentate, lateral margins with a deep fovea midway between eye and mandible, labrum semicircular, cheeks nearly as wide as short diameter of eye. Pronotum narrow, widening greatly on the pleurae; mesonotum flatly convex; pleurae and sternae bulging, separated by a wide costate furrow; disc of scutellum convex, semicircular, a wide and deep groove in front divided by a median carina; grooves separating the thin pleurite between the mesopleurae and metapleurae costate; metanotum areolate, lateral posterior angles denticu-

late, the disc traversed by four longitudinal (central pair united anteriorly) and numerous fine transverse carinae, posterior face 5-areolate. Abdomen basally depressed, compressed apically, each segment with a transverse fascia of hairs posteriorly, 1st tergite less than twice as long as wide, ligulate and margined at the sides, 2nd and 3rd quadrate, separated only by a faintly impressed line, 3rd narrowing somewhat apically and marked by a faint line across anterior sixth, 4th to 8th successively shorter, ovipositor longer than abdomen. Legs long and slender, hind femora scarcely longer than coxae and somewhat compressed.

Wings reaching tip of body, yellowish brown, a transverse hyaline band below parastigma, nervures dark brown, stigma lanceolate and ochraceous, radial cell short and narrow, 1st abscissa of cubitus almost entirely obliterated, 2nd cubital cell quadrate.

Hab. Piroe, Ceram. One specimen. Collected by F. Muir.

***Biroia ferruginea*, n. sp.**

♂ 10 mms. long. Smooth and shining, punctate and hairy; ferrugineous to the metathorax, metathorax and middle legs brownish black to black, hind legs and abdomen deep black and polished.

Head transverse, wide between the eyes, which are prominent and bulging, viewed from in front triangular; ocelli arranged in an isosceles triangle on the vertex, the anterior angle of which is obtuse, lateral members further from the eye than from each other; front excavated and margined behind to ocelli; antennae joined close to the eye, widely separate, lateral emargination continued around the base, almost confluent directly between the eyes, 1st and 3rd segments small, 2nd stout, half as wide as long, flagellum filamentous, opaque and hairy; face longer than wide, narrowed and convex below, lateral margin foveate beneath eye, labrum nearly quadrate, cheeks almost as long as eye. Pronotum with two transverse carinae, pleurae concave; mesonotum flatly convex, mesosternae bulging, separated from pleurae by a broad costate furrow; disc of scutellum triangulate and depressed apically, basally bifoveate, grooves separating thin pleurite between the mesopleurae and metapleurae costate; metanotum areolate. Abdomen depressed, 1st, 2nd and 3rd segments subequal, less than twice as long as wide, 1st bicarinate at the base, 2nd with a transverse groove at about the middle and separated from 3rd by a thin furrow, 4th to 8th progressively smaller, each segment with a transverse fascia of hairs posteriorly. Hind legs longer than the anterior ones, coxae stout, femora short and compressed.

Wings dark brown with hyaline spots below the lanceolate stigma, radial cell short and narrow, 1st abscissa of cubitus obliterated, 2nd cubital cell subquadrate.

Hab. Roban, Java. One specimen. Collected by F. Muir.

***Braunsia variegata*, n. sp.**

♀ 10 mms. long. Smooth and shining, head and thorax finely punctate and hairy, abdomen for two-thirds its length longitudinally striate, apically microscopically finely sculptured and hairy; black, the cheeks, labrum, trophi, basal segment of the antennae, pronotum and posterior margin of the pro- and mesopleurae, tegulae, lateral areas of the scutellum, the postscutellum, metanotum in the middle and anteriorly on sides and below on the pleurae, basally on 1st and 2nd abdominal segments (on the 1st continued as a stripe along the middle), a transverse stripe along the furrow between 2nd and 3rd segments (continued anteriorly and posteriorly along the sides), anterior and middle legs entirely, a stripe on posterior aspect of coxae, trochanters, tibiae (except at apex) and tibial spurs of hind legs ochraceous. Head transverse, triangular viewed from in front, wide between the eyes which are prominent and bulging, ocelli ferruginous, arranged in an isosceles triangle on the polished vertex, the anterior angle extremely obtuse, lateral members about 1 diameter from anterior, about 2 diameters from each other; front deeply excavate, between antennae, which are widely separated at the base and joined close to the eyes, are filamentous and multi-segmented (broken off apically), 2nd segment stout, twice as long as wide, 3rd only half both shining, punctate and sparsely clothed, the flagellum densely clothed and opaque; face very hairy, foveate on the sides anteriorly, labrum prominent, cheeks wide, nearly one-half long diameter of eye. Pronotum narrow, pleurae well developed, mesonotum with anterior furrows indistinct, parapsidal grooves complete and distinct, converging posteriorly and merging before attaining posterior margin, lateral margins as well as parasides crenulate, mesopleurae convex, the mesosternum bulging, the wide groove between them crenulate, also a transverse furrow on mesopleurae close to the dorsal margin and another short furrow posteriorly, joining the crenulate posterior margin; disc of scutellum triangular with a deep fovea in front, divided in the middle by a thin carina, the lateral areas of scutellum as well as the postscutellum and metanotum strongly margined posteriorly, the last strongly convex, with a median anterior carina, and very hairy, the pleurae also very hairy and the spiracle elliptical. Abdomen slender, longer than head and thorax together, subpetiolate, 1st segment widening posteriorly, about 5 times as long as apically wide, longitudinally bicarinate in the middle and striate apically, 2nd and 3rd segments solidly joined, also

widening slightly apically, together about as long as 1st, the suture a little behind the middle, longitudinally striate to an impressed line about one-third the length of 3rd segment from posterior margin, beyond this the tergites, including 4-8, smooth and shining and more or less compressed laterally, with a transverse fascia of hairs at about the middle, the sternite of the 7th segment plowshaped, ovipositor as long as body, the valves hairy. Legs long, slender, hind coxae very large and stout. Wings reaching beyond tip of abdomen, subhyaline, with a brownish yellow suffusion, stigma and nervures dark brown, stigma lanceolate, radial cell short and narrow, areola triangular, cubitus obliterated between 1st cubital and 1st discoidal and beyond areola, a stump of a vein proceeds from 2nd cubital cross-vein, subdiscoidal nervure and the anal nervure apically as well as radius in hind wing obliterated.

Hab. Borneo. One specimen. Collected by F. Muir.

***Microdus amboinensis*, n. sp.**

♂ 5 mms. long. Black, shining, punctate and hairy, abdomen impunctate, polished, front and middle legs except coxae, and trophi yellowish brown.

Head transverse, wide between the eyes, triangular when viewed from in front, eyes bulging, ocelli arranged in an isosceles triangle on the vertex, the anterior angle extremely obtuse, the anterior member less than 1 diameter from lateral, lateral members nearly as far from each other as from margin of eye; front broadly carinate in the middle and deeply excavate behind the antennae, the excavations not margined behind; antennae 38-jointed, nearly as long as body, basal joints stout, flagellum filamentous, opaque and hairy; face wider than long, clypeus foveate laterally, cheeks shorter than short diameter of the eye. Pronotum and pleurae divided transversely, the latter widening posteriorly and polished on the disc, middle lobe of mesonotum prominent in front, the parapsides and lateral margins behind costate, sternae and pleurae separated by a costate furrow, hind margin of pleurae also marked by a costate furrow, the disc polished; scutellum divided transversely before hind margin by a costate furrow, the disc triangular, depressed apically, a broad costate groove basally; metanotum very coarsely rugose, spiracles nearly circular, pleurae finely rugose, punctate on disc, dorsal and anterior margins marked by costate furrows. Abdomen as long as thorax, depressed basally, 1st segment longer than wide, tergite strongly carinate laterally, striate on the disc, a deep furrow between 1st and 2nd, 2nd and 3rd solidly joined, separated dorsally by only a fine line, and 2nd impressed transversely at middle, 4th, 5th and 6th transverse, a thin fascia of hairs near apical margins. Hind legs stouter than anterior ones.

Wings hairy and suffused with pale brown apically, denuded and hyaline basally, radial cell short and narrow, cubitus and subdiscoidal nervures almost completely obliterated, areolet long petiolate and itself reduced almost to obliteration. Nervures in hind wings obliterated apically.

Hab. Amboina. One specimen. Collected by Muir.

Apparently belongs to the same group as *M. pedunculatus*, Szep., from Sydney, N. S. W.

***Microdus distinctus*, n. sp.**

♀ 3 mms. long. Black, shining, punctate and partly clothed with hairs, metanotum coarsely rugose, abdomen microscopically rugulose on basal segment, polished apically, front and middle legs, trophi and hind legs at the knee brown.

Head transverse, wide between the eyes, which are strongly convex, ocelli arranged in an isosceles triangle on the vertex, the anterior angle obtuse, anterior member less than 1 diameter from lateral, which are equidistant from the eye and from each other; front broadly carinate in the middle and deeply excavate behind the antennae, the excavations not margined posteriorly; antennae 29-jointed, shorter than the body, basal joint stout, flagellum filamentous, opaque and hairy, recurrent apically; face a little wider than long, lateral margins of the clypeus foveate, cheeks about half the short diameter of the eye. Pronotum narrow, the pleurae wider, divided by a transverse groove, disc polished; mesonotum convex, parapsides and lateral margins costate, sternae and pleurae separated by a costate furrow, hind margin of the latter also marked with a costate furrow, the disc polished, disc of the scutellum triangulate, a broad, deep, costate groove at the base; metanotum convex, the pleurae punctate on the disc, dorsal and anterior margins marked by costate furrows. Abdomen as long as the thorax, first three tergites flat dorsally, 1st longer than wide and carinate at the base, 2nd and 3rd together longer than 1st, the furrow between 1st and 2nd deeply impressed on either side of the middle, division between 2nd and 3rd lightly marked, 4th to 8th transverse. Ovipositor longer than the abdomen. Hind legs stouter than the anterior ones.

Wings infusate and hairy, radial cell short and extremely narrow, 1st abscissa of the cubitus obliterated, areolet petiolate.

Hab. Amboina. One specimen. Collected by F. Muir.

Sub-fam. CARDIOCHILINAE.

***Laminitarsus* new genus (type *muirii*).**

Head transverse, face wide and short, eyes elongate, oval and convex, cheeks well developed, temples full, front excavated, ocelli arranged in an isosceles triangle, the anterior angle of which is very obtuse, the anterior member less than half its diameter from lateral members, these about 2 diameters

from each other and 4 from border of eye. Antennae long and slender, 51-segmented, 1st segment very stout, maxillary palpi 6-segmented, labial palpi 4-segmented. Thorax as broad as the head, pronotum short and inconspicuous, mesonotum flatly convex, parapsidal furrows complete and deep, meeting before the posterior margin, pleurae well developed, scutellum rounded behind, the disc triangular, a broad and deep fovea in front, with 5 fine longitudinal septa, postscutellum well developed and divided into 2 smaller and 2 larger angular areas by diagonally transverse carinae, metanotum flat, pleurae perpendicular, the spiracles large and slit-like. Abdomen small, short oval, sessile, distinctly segmented. Legs long, especially hind ones, which extend far beyond the body; the tibiae are flattened and expanded apically and the metatarsus, nearly twice as long as the remaining tarsal segments together, has a broad leaf-like expansion on the inner side. Tibial spines double, the outer nearly twice as long as the inner and about half as long as the metatarsus. Wings infumated, stigma narrowly lanceolate, radial vein partially obliterated beyond 2nd abscissa and the 2nd cubital cell incomplete from obliterated cross-vein, 1st discoidal cell long petiolate, transverse medial postfurcal. Radius in hind wings nearly entirely obliterated, submedian cell very short.

Laminitarsus muirii, n. sp.

♀ 8 mms. long. Ochraceous to pale brown, antennae beyond 1st segment, a broad vitta posteriorly on head reaching middle of eyes and a large spot in front of ocelli, three similar vittae on mesonotum, the middle one reaching anterior, the two lateral ones the posterior margin, another on mesosternum leaving only a narrow angular area on anterior and posterior margin in middle, transverse bands on 3rd, 4th, 5th and 6th segments of abdomen and spots on mid and hind trochanter and hind coxae, at base and apex of hind tibiae and tarsi entirely black. Head and thorax rugoso-punctate and hairy, abdomen smooth. Antennae 51-segmented, wings infumated, ovipositor short and inconspicuous.

Hab. Los Baños, Philippine Islands. One specimen. Collected by F. Muir, VIII-15.

Sub-fam. OPIINAE.

Austroopius amboinensis, n. sp.

♀ 6 mms. long. Ochraceous, abdomen black, smooth and polished throughout. Head transverse, wide between the eyes, which are bulging, ocelli arranged in an equilateral triangle on the vertex, the members removed from each other about half a diameter, the enclosed space black, from margin of eye about 2 diameters, shallowly excavated in front of ocelli, antennal sockets next the eye margin, which is here slightly

emarginate, antennae 62-segmented, long and slender, black except segments 1 and 2 which are also stouter, and hairy; face broad, slightly bulged, closely and distinctly punctate and hairy, faintly carinated above, clypeus distinct, cheeks narrow, mandibles stout, tips black, bidentate, a distinct slit-shaped mouth opening, palpi slender, 6 and 4-segmented respectively. Thorax as wide as the head and deeper than wide, pronotum inconspicuous but the pleurae well developed, notauli conspicuous, fairly deep, mesopleurae with a short groove on posterior margin and hairy in parts, disc of scutellum angulate, octafoveate in front, metanotum convex with a median carina which bifurcates behind forming a small semilunar areola, pleurae hairy, the groove separating notum and pleura wide and steep, the circular spiracle at about the middle. Abdomen subsessile, short ovate, not longer than the thorax and depressed, 1st segment about as long as its width behind, with a broad keel, the minute spiracles are slightly elevated and median in position, following segments all transverse and nearly subequal, all finely and sparsely punctured and hairy above and below, ovipositor exerted about one half the length of the abdomen, the legs long, thin and hairy. The wings hyaline, stigma fairly broad, radius arising at the middle, 1st abscissa less than half the 2nd, which is longer than the fusiform 1st cubital cross-vein, 2nd cubital cell narrower outwardly than at base, the 1st cubital and the 1st discoidal cells are separate and the latter is short petiolate, almost sessile, the transverse medial nervure is postfurcal, the discoidal nervure beyond is greatly thickened, the recurrent nervure is strongly curved and at the end where it merges with the cubital is strongly incrassate, a slight suffusion at end of the anal nervure. In the hind wings the radius is obliterated and the submedian cell is about half the length of the median.

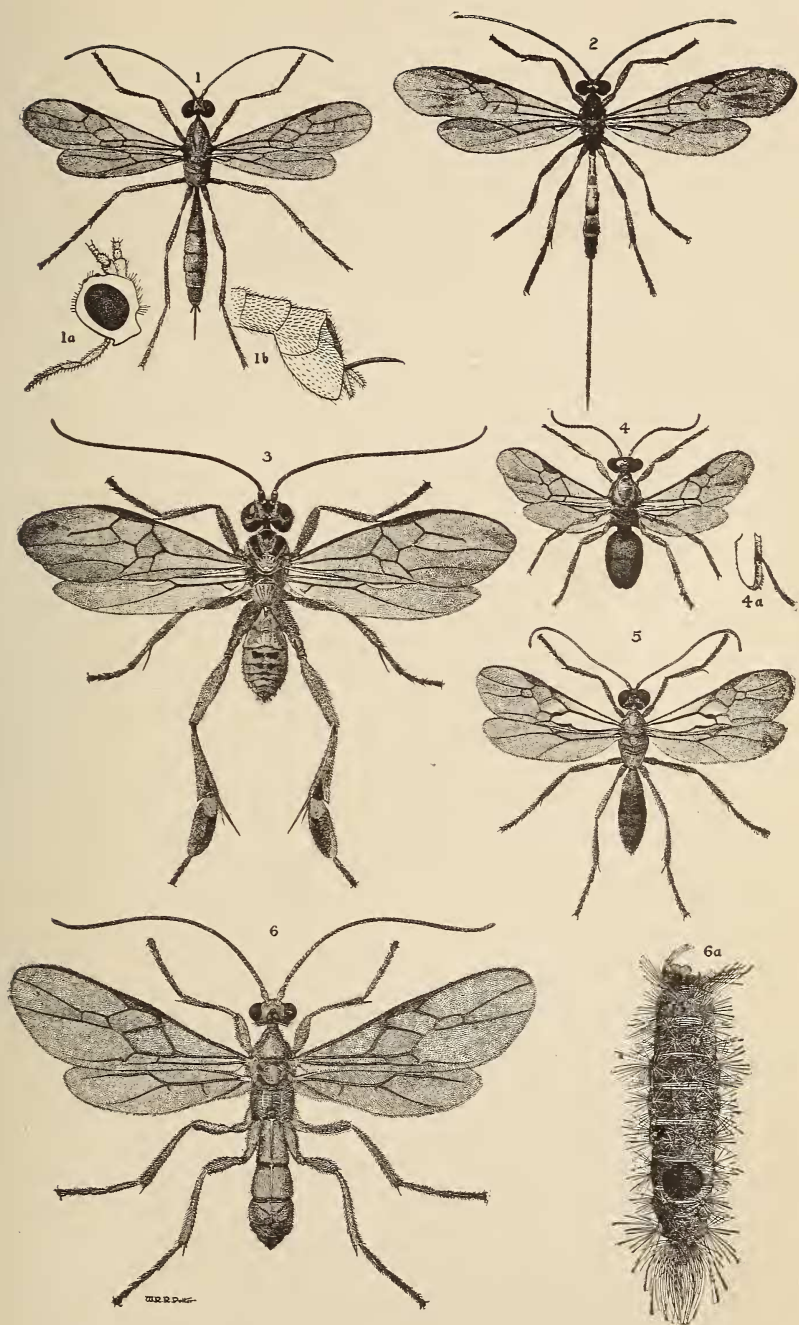
The ♂ has the abdomen concolorous instead of black.

Hab. Amboina. One ♀ and four ♂ specimens. Collected by F. Muir.



EXPLANATION.

- Fig. 1. *Macrostomion amboinensis* ♀ x $3\frac{1}{2}$.
a, lateral view of head showing maxillary palp of this sex;
b, apical segments of abdomen in lateral view. Both much enlarged.
- Fig. 2. *Braunsia variegata* ♀ x $2\frac{2}{3}$.
- Fig. 3. *Laminitarsus muirii* ♀ x $3\frac{1}{2}$.
- Fig.. 4. *Muiriella concisa* ♀ x $8\frac{1}{2}$.
a, lateral view of abdomen.
- Fig. 5. *Hemigyroneuron dubiosus* ♂ x 3.
- Fig. 6. *Heterogamoides muirii* ♀ x $4\frac{1}{2}$.
a, the spiny pupa from which it emerged x 3.



MALAYAN BRACONIDAE.